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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,429	02/27/2004	Sun-Dong Lee	P2009US00	6998
	7590 12/26/200 <b>ASSOCIATES</b> , PLC	EXAMINER		
8500 LEESBUI		CASCA, FRED A		
SUITE 7500 VIENNA, VA 22182			ART UNIT	PAPER NUMBER
			2617	
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary		Application No.	Applicant(s)				
		10/788,429	LEE, SUN-DONG				
		Examiner	Art Unit				
		FRED A. CASCA	2617				
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) 又	Responsive to communication(s) filed on <u>14 Oo</u>	ctober 2008					
•	• • • • • • • • • • • • • • • • • • • •	action is non-final.					
·—	<del>/</del>						
- ,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)🖂	Claim(s) <u>1,2,4-14 and 18-26</u> is/are pending in t	he application.					
·	4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-2, 4-14 and 18-26</u> is/are rejected.							
· ·	Claim(s) is/are objected to.						
	Claim(s) are subject to restriction and/or	election requirement.					
Application Papers							
9) ☐ The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
,—	Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority บ	nder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)							
1)							
3) 🔲 Inforr	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		atent Application (PTO-152)				

Office Action Summary

#### **DETAILED ACTION**

1. This action is in response to applicant's amendment filed on October 14, 2008. Claims 1-

2, 4-14 and 18-26 are still pending in the present application. This Action is made FINAL.

### Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 4, 8-14, 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (U.S. Pub. No. 2002/0111167 A1), in view of Oota et al (US 2003/0176205 A1), further in view of Troen-Krasnow et al (U.S. Patent No. 6,493,431 B1), and still further in view of Halim et al (US 2003/0092454 A1).

Referring to claim 1, Nguyen discloses an incoming message alarming system (abstract), comprising a wireless communication system for to transmit an incoming message to a called mobile communication terminal, and to transmit a notification message including an identification of a calling mobile communication terminal (paragraphs 7 and 8, "This is followed by notifying the called MS that the incoming voice call is waiting, determining whether the called MS accepted the incoming voice call, and delivering the incoming voice call to the called MS"), and

a messenger service system to receive the first notification message from the wireless communication system and for sending a notification message (paragraph 7-8, "message center", "notification", "SMS", "Data Waiting Indicator", "the MC then sends a Short Message Service (SMS) message containing a Data Waiting Indicator"),

wherein the incoming message comprises voice communications or data communications (abstract, paragraphs 4, and 6-8, "voice call", "data").

Nguyen does not specifically disclose a first notification and a second notification in format claimed by applicant.

In the same field of endeavor Oota discloses a first notification and a second notification for notifying an incoming call where the first and the second notifications are different from each other (paragraph 8, "first notifying section for notifying an incoming call", "second notification section for notifying an unanswered incoming call by causing a light emitting element").

An advantage of providing a second notification different from the first notification message is that the user may be more responsive to the second type of notification, e.g., the user may have hearing impairment, or the environment may allow the user to be more responsive to the second type of notification.

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Nguyen by incorporating the teachings of Oota, and provide the system of Nguyen with a first and a second notification message, for the purpose of increasing the possibility of response by the user.

The combination of Nguyen/Oota does not specifically disclose sending the second notification messages to a personal computer.

In the same field of endeavor, Troen-Krasnow discloses sending incoming message alarming information indicating arrival of the incoming message to a personal computer (abstract, col. 1, line 60 through col. 2, line 2, and col. 5, lines 1-60, col. 6, lines 1-50, particularly col. 5, lines 1-6, "server 180 then identifies the calling party based on the calling party's telephone number", "The notification message from the message server 180 may be an electronic mail (email) message transmitted to the called party's personal computer over a computer network", "called party may log onto the message server 180 via network 400 to retrieve the message").

An advantage of sending an incoming call notification message to a personal computer is that when a mobile user is working on a computer in an environment where his/her mobile phone is shut off or radio communication is suppressed. Then such notification via a personal computer will enable him/her to be notified of his/her incoming calls.

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the system of Nguyen/Oota by incorporating the teachings of Troen-Krasnow, and consequently providing sending the second incoming message notification to a personal computer of the called party, for the purpose of providing a more efficient incoming call notification system where a mobile phone user is notified of any incoming calls even when he/she is in a suppressed environment.

The combination does not specifically disclose the second message for providing notification that the called mobile communication terminal is receiving the incoming message.

However, the concept of sending ACKs and NAKs is well known and used in the art of communication, as Halim discloses sending ACKs when an SMS message is delivered to a user (paragraphs 38 and 43).

It would have been obvious to one of the ordinary skill in the art the time of invention to modify the combination in the format claimed by incorporating the teachings of Halim, for the purpose of providing an efficient communication system.

Referring to claims 8, 11 and 18, claims 8, 11 and 18 define a wireless communication system, a messenger service system, and a method for alarming an incoming message reciting features analogous to the message alarming system defined by claim 1 (as rejected above). Thus, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose all elements of claims 8, 11 and 18 (please see the rejection of claim 1 above).

Referring to claim 2, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose the incoming message alarming system of claim 1, and further disclose the wireless communication system comprises a base station for receiving the incoming message, a mobile switching center for transmitting the first notification message to the messenger service system, and a home location register for storing location information of a called subscriber, subscriber information representing whether or not the called subscriber is an incoming message alarming service subscriber, and flag information indicating an activation state of the incoming message alarming service (Nguyen, figure 1-2, and paragraphs 8-10, and 21-27, 31 and 33, "BS-1", "BS-2", "MSC-1", "MSC-2", "HLR", note that the subscriber is informed of the messages, hence a

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flag is inherently indicating the activation state of the incoming call, "notification", "SMS", "Data Waiting Indicator"). "HLR", note that the HLR inherently comprises the database where the database has IP information about the subscribers in its domain).

Referring to claim 23, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose the incoming message alarming system of claim 1, and further disclose the messenger service system comprises a messenger information database for storing an IP address and a messenger ID of a called subscriber corresponding to the called mobile communication terminal (Troen-Krasnow, Figures 1-5, col. 4, lines 29-41, col. 5, line 1-65, col. 6, lines 1-47, "the message server 180 receives the telephone call and reads the original called number, such as he Dialed Number Identification Service . . to identify the called party (step 315), "the message server 180 sends a notification to the called party... to the called party's personal computer", "network 400 may include an Internet", note the called party is identified according the number that was dialed, thus a messenger information database exists and stores the a messenger ID of the called party. Further, a message notification is sent to the called party's personal computer and through the Internet, hence it is inherent that IP address of the called party is found and used so that the notification message is sent to the called party's computer. Hence, it is inherent that messenger information database exists for storing IP address and a messenger ID of the called subscriber); and a messenger server for receiving the first notification message from the wireless communication system and for sending the second notification message, wherein the personal computer corresponds to the IP address (Troen-Krasnow, Figures 1-5, col. 4, lines 29-41, col. 5, line 1-65, col. 6, lines 1-47, note that a message notification is sent to the called party's

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personal computer and through the Internet, hence it is inherent a messenger server exits for receiving the base alarm information from the wireless communication system and sending the incoming message alarming information to the personal computer according to the IP address).

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the system of Nguyen/Oota/Troen-Krasnow by incorporating the teachings of Troen-Krasnow, and consequently providing the messenger service system to comprise a messenger information database for storing an IP address and a messenger ID of the called subscriber and a messenger server for receiving the base alarm information from the wireless communication system and sending the incoming message alarming information to the personal computer according to the IP address for the system of Nguyen, motivation being for the purpose of identifying the called party accurately through the Internet and sending notification via user's computer, and allowing the called party to receive and retrieve notifications and messages while logged on to a personal computer, and providing convenience to the user.

Referring to claim 4, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose the incoming message alarming system of claim 23, and further disclose the messenger server stores use information or whether to use an incoming message service alarming service in the messenger information database (Nguyen, figures 1-2, and paragraphs 8-10, and 21-23).

Referring to claims 9 and 14, the combination of Nguyen/Oota/Troen-Krasnow/Halim discloses the wireless communication system and the messenger service system of claims 8 and 11, and further disclose information in the first notification message is or the second notification message comprises an identification of the called mobile communication terminal and an identifications of a calling mobile communication terminal (see the rejection of claim 1).

Referring to claim 10, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose the wireless communication system of claim 8, and further disclose the mobile switching center stores the first notification message (Nguyen, figures 1-2, and paragraphs 21-23).

Referring claim 12, the combination of Nguyen/Oota/Troen-Krasnow/Halim disclose the messenger service system of claim 11, and further disclose the second notification message is transmitted through the internet to the personal computer (Troen-Krasnow, col. 1, line 60 through col. 2, line 2, and col. 5, lines 1-60, col. 6, lines 1-50).

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the system of Nguyen by incorporating the teachings of Troen-Krasnow, motivation being for the purpose of allowing the called party to receive and retrieve notifications and messages while logged on to a personal computer, and providing convenience to the user.

Referring to claim 13, the combination of Nguyen/Oota/Troen-Krasnow/Halim discloses the messenger service system of claim 11, and further discloses the messenger server stores the second notification message (Nguyen, paragraphs 7-10, and 21-23).

Referring to claim 19, the combination of Nguyen/Oota/Troen-Krasnow/Halim disclose the method of claim 18, and further disclose the step of transmitting a first notification message further comprises receiving the incoming message from a calling mobile communication terminal; and determining an activation state of an incoming message alarming service (Nguyen, paragraphs 7-10, and 21-24).

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Referring to claim 20, the combination of Nguyen/Oota/Troen-Krasnow/Halim discloses the method of claim 18, and further disclose the step of providing notification comprises determining if a called subscriber has logged in to an incoming messenger alarming service (Nguyen, figure 1-2, and paragraphs 7-10, 16-19, and 21-23).

The combo of Nguyen/Oota does not specifically disclose transmitting the incoming message alarming information to a personal computer, and displaying on the personal computer an incoming message alarming window indicating that the called mobile communication terminal is receiving the incoming message as claimed.

Troen-Krasnow teaches transmitting the incoming message alarming information to the personal computer, which the called subscriber has logged in; and creating an incoming message alarming window indicating the incoming message's arrival (col. 1, line 60 through col. 2, line 2, and col. 5, lines 1-60, col. 6, lines 1-50, "server 180 then identifies the calling party based on the calling party's telephone number", "The notification message from the message server 180 may be an electronic mail (email) message transmitted to the called party's personal computer over a computer network", "a LAN, a WAN . . . to which the computer 410 has access", "called party may log onto the message server 180 via network 400 to retrieve the message").

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the system of Nguyen/Oota by incorporating the teachings of Troen-Krasnow, for the purpose of allowing the called party to receive and retrieve notifications and messages while logged on to a personal computer, and providing an efficient notification system.

Referring to claim 21, the combinations of Nguyen/Oota/Troen-Krasnow/Halim discloses the method of claim 19, and further discloses the step of transmitting a first notification message further comprises storing the first notification message (see rejection of claim 1).

Referring to claim 22, the combinations of Nguyen/Oota/Troen-Krasnow/Halim discloses the method of claim 20, and further discloses storing the second notification message (Nguyen, paragraphs 7-10, and 21-23).

Referring to claim 24, the combinations of Nguyen/Oota/Troen-Krasnow disclose the system of claim 11 and further disclose the messenger server includes messenger server database (Nguyen, figures 1-4, col. 7-10, 16-19 and 21-24).

Referring to claims 25 and 26, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose the systems of claims 9 and 14, and further disclose the first notification message or the second notification message comprises a data message (Nguyen, abstract, paragraphs 7 and 8, rejection of claim 1)

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (U.S. Pub. No. 2002/0111167 A1), in view of Oota et al (US 2003/0176205 A1), further in view of Troen-Krasnow et al (U.S. Patent No. 6,493,431 B1), and still further in view of Halim et al (US 2003/0092454 A1) and still further in view of Shiraogawa et al (US 2004/0253975 A1).

Referring to claim 5, the combinations of Nguyen/Oota/Troen-Krasnow/Halim disclose the incoming message alarming system of claim 4.

The combinations of Nguyen/Oota/Troen-Krasnow/Halim do not disclose flag information is updated by the use information in the format claimed by applicant.

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However, flag updating is common in communication system, particularly in TCP header where flags are continually updated according to communication status, as Shiraogawa discloses flag updating in response to data transfer status (paragraph 52).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate the teachings of Best into that of Nguyen/Oota/Troen-Krasnow/Halim and consequently providing flag information stored in the wireless communication system and indicating an activation state of the incoming alarming service for the purpose of providing a more communication system.

Referring to claim 6, the combinations of Nguyen/Oota/Troen-Krasnow/Shiraogawa disclose the alarming system of claim 5, and further disclose the messenger server transmits the second notification message to the personal computer when the incoming message alarming service has been activated (Nguyen, figures 1-2, and paragraphs 8-10, and 21-23, Troen-Krasnow, col. 1, line 60 through col. 2, line 2, and col. 5, lines 1-60, col. 6, lines 1-50)

Referring to claim 7, the combination of Nguyen/Oota/Troen-Krasnow/Shiraogawa disclose the incoming message alarming system of claim 5, and further disclose the messenger server stores the second notification message when the incoming message alarming system has is not activated (Nguyen, figures 1-2, and paragraphs 21-23, and Troen-Krasnow, col. 1, line 60 through col. 2, line 2, and col. 5, lines 1-60, col. 6, lines 1-50).

## **Response to Arguments**

5. Applicant's arguments with respect to claims 1-2, 4-14 and 18-26 have been considered but they are not persuasive.

In response to arguments that the combination of cited references does not disclose the second message for providing notification that the called mobile communication terminal is receiving the incoming message, the examiner respectfully disagrees. Halim's disclosure of sending ACKs when an SMS message is delivered to a user would enable a person of ordinary skill in the art to modify the combination in the format claimed by applicant. What is the purpose of the second message for providing notification that the called mobile communication terminal is receiving the incoming message? It appears that Halim's sending of ACKs when an SMS message is delivered would serve the same purpose as applicant's second message for providing notification that the called mobile communication terminal is receiving the incoming message. Please see the rejection of claim 1 for more details.

#### Conclusion

6. **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/

Supervisory Patent Examiner, Art Unit 2617